

Division 3. Air Resources Board

Chapter 1. Motor Vehicle Pollution Control Devices

Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles)

§ 1956.1. Exhaust Emission Standards and Test Procedures -- 1985 and Subsequent Model Heavy Duty Urban Bus Engines and Vehicles.

(a) The exhaust emissions from new 1985 and subsequent model heavy-duty diesel cycle urban bus engines and vehicles fueled by methanol, natural gas, liquefied petroleum gas, and petroleum shall not exceed the following, by model year:

(1) 1985-1986 -- 1.3 grams per brake horsepower-hour (g/bhp-hr) total hydrocarbons (or Organic Material Hydrocarbon Equivalent [OMHCE] for methanol-fueled buses), 15.5 g/bhp-hr carbon monoxide (CO), and 5.1 g/bhp-hr oxides of nitrogen (NOx).

(2) 1987- (a manufacturer may certify to the 1988 emission standards one year early as an option) -- 1.3 g/bhp-hr total hydrocarbons (or OMHCE for methanol-fueled buses), 15.5 g/bhp-hr CO, and 5.1 g/bhp-hr NOx.

(3) 1988-1990 -- 1.3 g/bhp-hr HC (or OMHCE for methanol-fueled buses), 15.5 g/bhp-hr CO, 6.0 g/bhp-hr NOx, 0.60 g/bhp-hr particulate matter (PM), and for 1990 only, 1.2 g/bhp-hr optional non-methane hydrocarbons (NMHC).

(4) 1991-1993 -- 1.3 g/bhp-hr HC (or OMHCE for methanol-fueled buses), 1.2 g/bhp-hr optional NMHC, 15.5 g/bhp-hr CO, 5.0 g/bhp-hr NOx, and 0.10 g/bhp-hr PM. Emissions from methanol-fueled, natural-gas-fueled and liquefied-petroleum-gas-fueled urban bus engines may be included in the averaging program for petroleum-fueled engines other than urban bus engines.

(5) 1994-1995 -- 1.3 g/bhp-hr HC (or OMHCE for methanol-fueled buses), 1.2 g/bhp-hr optional NMHC, 15.5 g/bhp-hr CO, 5.0 g/bhp-hr NOx (or optional 3.5 g/bhp-hr to 0.5 g/bhp-hr NOx), and 0.07 g/bhp-hr PM. Emissions from methanol-fueled, natural-gas-fueled and liquefied-petroleum-gas-fueled urban bus engines, may be included in the averaging program for petroleum-fueled engines other than urban bus engines.

(6) 1996-2003 -- 1.3 g/bhp-hr HC or OMHCE, 1.2 g/bhp-hr optional NMHC, 15.5 g/bhp-hr CO, 4.0 g/bhp-hr NOx, and 0.05 g/bhp-hr PM (0.07 PM g/bhp-hr in-use), except as provided in paragraph (7) below.

(A) For 1996 and 1997 only, a manufacturer may apply to the Executive Officer for an exemption from the 4.0 g/bhp-hr NOx standard, not to exceed 10% of the average of the manufacturer's total urban bus sales in California for the three preceding model years, upon providing technical justification and sales data for each exemption applied for.

(B) 1998 through 2003 model year engines may generate averaging, banking, and trading credits in accordance with the requirements for averaging, banking and trading programs set forth in "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy Duty Diesel Engines and Vehicles" incorporated by reference in subdivision (b) of this section.

(C) Manufacturers may choose to certify 1998 through 2002 model year bus engines produced before October 1, 2002, to an optional NOx emissions standard between 0.5 g/bhp-hr and 2.5 g/bhp-hr. A manufacturer may certify to any standard between the values of 2.5 g/bhp-hr and 0.5 g/bhp-hr, by 0.5 g/bhp-hr increments. Manufacturers may not use engines certified to this optional NOx standard for any averaging, banking, or trading program set forth in "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy Duty Diesel Engines and Vehicles" incorporated by reference in subdivision (b) of this section.

(7) October 1, 2002, PM standard -- For diesel-fueled, dual-fuel, and bi-fuel bus engines, the PM standard shall be 0.01 g/bhp-hr (0.01 PM g/bhp-hr in-use) for 2002 and subsequent model year engines produced beginning October 1, 2002. Manufacturers may choose to meet this standard with an aftertreatment system that reduces PM to 0.01 g/bhp-hr.

(8) October 2002-2006 optional standards -- Except for diesel-fueled, dual-fuel, and bi-fuel engines, manufacturers may choose to certify 2002-2006 model year bus engines produced beginning October 1,

2002, to an optional 1.8 g/bhp-hr to 0.3 g/bhp-hr NOx plus NMHC standard, measured as the arithmetic sum of the NOx and NMHC exhaust component certification values, without restriction on individual component certification values; provided that engines certified to this optional reduced-emission NOx plus NMHC standard may not participate in any averaging, banking, or trading program set forth in the test procedures document incorporated by reference in subdivision (b) of this section. A manufacturer may certify to any standard between the values of 1.8 g/bhp-hr to 0.3 g/bhp-hr, by 0.3 g/bhp-hr NOx + NMHC increments. Manufacturers certifying to this optional standard must also certify to a PM standard of 0.03, 0.02, or 0.01 g/bhp-hr.

(9) October 2002-2003 optional standards for diesel-fueled, dual-fuel, and bi-fuel engines -- Manufacturers may choose to certify 2002-2003 model year diesel-fueled, dual-fuel, and bi-fuel bus engines produced beginning October 1, 2002, to an optional 1.8 g/bhp-hr to 0.3 g/bhp-hr NOx plus NMHC standard, measured as the arithmetic sum of the NOx and NMHC exhaust component certification values, without restriction on individual component certification values; provided that engines certified to this optional reduced-emission NOx plus NMHC standard may not participate in any averaging, banking, or trading program set forth in the test procedures document incorporated by reference in subdivision (b) of this section. A manufacturer may certify to any standard between the values of 1.8 g/bhp-hr to 0.3 g/bhp-hr, by 0.3 g/bhp-hr NOx + NMHC increments. Manufacturers certifying to this optional standard must also certify to a PM standard of 0.01 g/bhp-hr.

(10) 2004-2006: Except as provided in paragraph (11), below, the required standard shall be 2.4 g/bhp-hr NOx + NMHC measured as the arithmetic sum of exhaust component certification values for these pollutants, without restriction on individual component values, 15.5 g/bhp-hr CO, and 0.05 g/bhp-hr PM (0.07 g/bhp-hr PM in-use).

(A) Manufacturers may choose to certify to a 2.5 g/bhp-hr optional combined NOx + NMHC standard, provided that the NMHC exhaust component certification value shall not exceed 0.5 g/bhp-hr.

(B) Emissions averaging may be used to meet the combined NOx + NMHC standard, the optional combined NOx + NMHC standard set forth in paragraph (A), and the PM standard.

(C) The combined NOx + NMHC standard and the optional combined NOx + NMHC standard described in paragraph (A) may serve as the certification standard for the higher emitting fueling mode of an engine certified under the dual fueling mode certification process set forth in section 1956.8(a)(4), Title 13, CCR.

(11) 2004-2006 -- For diesel-fueled, or dual-fuel, and bi-fuel urban bus engines, the standards are 0.5 g/bhp-hr NOx, 0.01 g/bhp-hr PM, 0.05 g/bhp-hr NMHC, 5.0 g/bhp-hr CO, and 0.01 g/bhp-hr formaldehyde. As an option, manufacturers may choose to meet the NOx and PM standards with a base engine that is certified to the standards in paragraph (10) above, equipped with an aftertreatment system that reduces NOx to 0.5 g/bhp-hr and PM to 0.01 g/bhp-hr standards. The NMHC, CO, and formaldehyde standards in this paragraph (11) shall still apply. Manufacturers shall be responsible for full certification, durability, testing, and warranty and other requirements for the base engine. For the aftertreatment system, manufacturers shall not be subject to the certification durability requirements, or in-use recall and enforcement provisions, but are subject to warranty provisions for functionality.

In addition, engine manufacturers may sell diesel-fueled, dual-fuel, or bi-fuel engines to any transit fleet exempted by the Executive Officer under paragraphs (c)(8) and (d)(7) of section 1956.2, Title 13, CCR, from the requirements of paragraphs (c)(5) and (d)(4) of section 1956.2, certified to the standards in either paragraphs (9) or (10) above, provided that engines certified to the standards in paragraph (10) must be certified to a 0.01 g/bhp-hr PM standard.

(12) 2007 and subsequent -- 0.2 g/bhp-hr NOx, 0.01 g/bhp-hr PM, 0.05 g/bhp-hr NMHC, 5.0 g/bhp-hr CO, and 0.01 g/bhp-hr formaldehyde.

(b) The test procedures for determining compliance with standards applicable to 1985 and subsequent heavy-duty diesel cycle urban bus engines and vehicles and the requirements for participation in the averaging, banking and trading programs, are set forth in the "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," adopted April 8, 1985, as last amended November 22, 2000, which is incorporated by reference herein.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43100, 43101, 43104 and 43806, Health and Safety Code; and Section 28114, Vehicle Code. Reference: Sections 39002, 39003, 39017, 39033, 39500, 39650, 39657, 39667, 39701, 40000, 43000, 43000.5, 43009, 43013, 43018, 43102 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.

HISTORY

§ 1956.2. Fleet Rule for Transit Agencies.

(a) To encourage transit agencies that operate urban bus fleets to purchase or lease lower emission alternative-fuel buses, while also providing flexibility to such fleet operators to determine their optimal fleet mix in consideration of such factors as air quality benefits, service availability, cost, efficiency, safety, and convenience, two paths to compliance with this fleet rule are available: the alternative-fuel path and the diesel path. Transit agencies must choose their compliance path, and shall notify ARB of their intent to follow either the diesel or the alternative-fuel path, by January 31, 2001. Reporting requirements for that notification are set forth in subdivisions (a) and (b) of section 1956.4, Title 13, CCR.

(b) For the purpose of the fleet rule specified in this section, the following definitions apply:

(1) "Alternative fuel" means natural gas, propane, ethanol, methanol, electricity, fuel cells, or advanced technologies that do not rely on diesel fuel. Alternative fuel also means any of these fuels used in combination with each other or in combination with other non-diesel fuels.

(2) "Active fleet" means a transit agency's total active fleet of urban buses, including spare buses, but not contingency vehicles (e.g., for emergencies) or non-revenue producing vehicles.

(3) "Transit agency" means a public entity responsible for administering and managing transit services. Public transit agencies can directly operate transit service or contract out for all or part of the total transit service provided.

(4) "Urban bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine, or of a type normally powered by a heavy heavy-duty diesel engine, with a load capacity of fifteen (15) or more passengers and intended primarily for intra-city operation, i.e., within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or token, rather than purchased in advance in the form of tickets, urban buses would normally have equipment installed for the collection of fares. Urban buses are also typically characterized by the absence of equipment and facilities for long distance travel, e.g., restrooms, large luggage compartments, and facilities for stowing carry-on luggage.

(c) Transit agencies on the alternative-fuel path shall meet the following requirements:

(1) Upon approval of the regulation, and through Model Year 2015, at least 85 percent of all urban buses purchased or leased each year must be alternative-fuel buses.

(2) NOx fleet average requirements as set forth in subdivision (e), below.

(3) Beginning October 1, 2002, only engines certified to an optional PM standard of 0.03 g/bhp-hr or lower shall be purchased when making new bus purchases.

(4) PM retrofit requirements and use of low-sulfur fuel as set forth in subdivision (f), below.

(5) Transit agencies on the alternative-fuel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, Title 13, CCR, except as provided in paragraph (c)(8) of this section.

(6) Zero-emission bus purchase requirements beginning in model year 2010, in accordance with the requirements set forth in subdivision (c) of section 1956.3, Title 13, CCR.

(7) Reporting requirements as set forth in section 1956.4, Title 13, CCR.

(8) The Executive Officer may exempt transit agencies on the alternative-fuel path from the requirements of paragraph (c)(5) of section 1956.2, Title 13, CCR, provided that:

(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;

(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (c)(5); and

(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.

(d) Transit agencies on the diesel path shall meet the following requirements:

(1) NOx fleet average requirements as set forth in subdivision (e), below.

(2) PM retrofit requirements and use of low-sulfur fuel as set forth in subdivision (f), below.

(3) Zero-emission bus demonstration in 2003-2004, as required in subdivision (b) of section 1956.3, Title 13, CCR.

(4) Transit agencies on the diesel path shall not purchase any diesel-fueled, dual-fuel, bi-fuel, or alternative-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, Title 13, CCR, except as provided in paragraph (d)(7) of this section.

(5) Zero-emission bus purchase requirements beginning in model year 2008, in accordance with the requirements set forth in subdivision (c) of section 1956.3, Title 13, CCR.

(6) Reporting requirements as set forth in section 1956.4, Title 13, CCR.

(7) The Executive Officer may exempt transit agencies on the diesel path from the requirements of paragraph (d)(4) of section 1956.2, Title 13, CCR, provided that:

(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;

(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (d)(4); and

(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.

(e) Beginning October 1, 2002, no transit agency shall own, operate, or lease an active fleet of urban buses with average NOx emissions in excess of 4.8 g/bhp-hr, based on the engine certification standards of the engines in the active fleet.

(1) This active fleet average requirement shall be based on urban buses owned, operated, or leased by the transit agency, including diesel buses, alternative-fuel buses, all heavy-duty zero-emission buses, electric trolley buses, and articulated buses, in each transit agency's active fleet. The Executive Officer may allow zero-emission buses that do not meet the definition of an urban bus to be included in the calculation of the fleet average standard upon written request to the ARB by January 31, 2002, and upon approval by the Executive Officer. The request shall include a description of the zero-emission buses, the zero-emission technology utilized, and the number of zero-emission buses to be used in calculating the NOx fleet average standard. Zero-emission buses not meeting the definition of an urban bus may not be used to satisfy the requirements of the Zero-emission Bus Demonstration Project set forth in subdivision (b) of section 1956.3, Title 13, CCR.

(2) Transit agencies may use ARB-certified NOx retrofit systems to comply with the fleet average requirement (in addition to bus purchases, repowerings, and retirements).

(3) Transit agencies have the option of retiring all 1987 and earlier model year diesel urban buses by October 1, 2002, to comply with the fleet average standard requirement.

(f) To reduce public exposure to diesel particulate matter, transit agencies and companies that lease buses to transit agencies shall retrofit diesel buses in their active fleets according to the schedule below, and shall operate their diesel buses on diesel fuel with a maximum sulfur content of 15 parts per million by weight. Documentation of compliance with these requirements must be provided in accordance with the provisions of subdivision (d) of section 1956.4, Title 13, CCR.

(1) Tier 1 -- Except as provided in (B) below, by January 1, 2003, transit agencies shall not own, operate or lease diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid buses in their active fleets with 1990 and earlier model year engines, unless those engines have been retrofitted as provided in paragraph (A), below. Transit agencies with fewer than 20 buses in their active fleets, and that operate in federal one-hour ozone attainment areas, are not required to comply with this requirement until January 1, 2007; provided that in areas redesignated as one-hour ozone non-attainment areas prior to January 1, 2007, transit agencies initially eligible for delayed compliance shall submit a plan to the Executive Officer within 30 days of redesignation for achieving compliance with this retrofit requirement.

(A) The retrofit device must be certified by the Executive Officer of the ARB in accordance with the procedures set forth in the "California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Diesel Engines" incorporated by reference in paragraph (f)(7) below.

(B) 1990 and earlier engines were originally certified to a PM standard of 0.60 grams per brake horsepower-hour. Only those 1990 and earlier engines that have been retrofitted to 0.10 grams per brake horsepower-hour PM with an ARB-certified retrofit device (to meet the requirements of the U.S. EPA urban transit bus rebuild and retrofit program, 40 CFR 85.1401-1415) are exempt from further retrofit requirements under this section.

(2) Tier 2 -- Transit agencies shall not own, operate or lease diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid transit buses in their active fleets with 1991 through 1995 model year engines, unless the engines have been retrofitted with a device that has been certified by the Executive Officer in accordance with the procedures set forth in the "California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Diesel Engines" incorporated by reference in paragraph (f)(7) below, and in accordance with the following schedule. Transit agencies with fewer than 20 buses in their active fleets, and that operate in federal one-hour ozone attainment areas shall comply with the 100 percent retrofit requirement by January

1, 2007, and are exempt from the interim requirements described in (A) and (B) below that apply before that date. In areas redesignated as one-hour ozone non-attainment areas prior to January 1, 2007, transit agencies initially exempt from the interim requirements shall submit a plan to the Executive Officer within 30 days of redesignation for achieving compliance with this retrofit requirement.

(A) Alternative-fuel path: 20 percent of these buses shall be retrofitted by January 1, 2003; 75 percent of these buses shall be retrofitted by January 1, 2004; and 100 percent of these buses shall be retrofitted by January 1, 2005, except for those buses eligible for the retirement exemption set forth in paragraph (f)(4), below.

(B) Diesel path: 50 percent of these buses shall be retrofitted by January 1, 2003; and 100 percent of these buses shall be retrofitted by January 1, 2004, except for those buses eligible for the retirement exemption set forth in paragraph (f)(4), below.

(3) Tier 3 -- Transit agencies shall not own or operate diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid buses in their active fleets with 1996 through 2002 model year engines produced before October 1, 2002, unless the engines have been retrofitted with a device that has been certified by the Executive Officer in accordance with the procedures set forth in the "California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Diesel Engines" incorporated by reference in paragraph (f)(7) below, and in accordance with the following schedule.

(A) Alternative-fuel path: 20 percent of these buses shall be retrofitted by January 1, 2007; 75 percent of these buses shall be retrofitted by January 1, 2008; and 100 percent of these buses shall be retrofitted by January 1, 2009, except for those buses eligible for the retirement exemption set forth in paragraph (f)(4), below.

(B) Diesel path: 20 percent of these buses shall be retrofitted by January 1, 2005; 75 percent of these buses shall be retrofitted by January 1, 2006; and 100 percent of these buses shall be retrofitted by January 1, 2007.

(4) For transit agencies on the alternative-fuel path, those buses that are within two years of retirement are exempt from the 100 percent retrofit requirement set forth in paragraphs (2)(A) and (3)(A), above, provided documentation of retirement is supplied to the Executive Officer in accordance with the requirements set forth in paragraph (d)(2) of section 1956.4, Title 13, CCR.

For transit agencies on the diesel path, those buses that are within one year of retirement are exempt from the 100 percent retrofit requirement set forth in paragraph (2)(B), above, provided documentation of retirement is supplied to the Executive Officer in accordance with the requirements set forth in paragraph (d)(2) of section 1956.4, Title 13, CCR.

(5) Beginning July 1, 2002, transit agencies shall not operate diesel buses on diesel fuel with a sulfur content in excess of 15 parts per million by weight. Transit agencies with fewer than 20 buses in their active fleets, and that operate in federal one-hour ozone attainment areas, are not subject to this low-sulfur fuel requirement until July 1, 2006. In areas redesignated as one-hour ozone non-attainment areas prior to July 1, 2006, transit agencies initially exempt from the low-sulfur fuel requirement shall submit a plan to the Executive Officer within 30 days of redesignation for achieving compliance with this requirement.

(6) Transit agencies that own, operate, or lease a diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid bus with an engine for which a retrofit device is not, or will not be, available to meet the retrofit requirements within 6 months of the dates specified in paragraphs (f)(1) through (f)(3) shall be eligible for a one-year delay in complying with the retrofit requirements, upon submittal of documentation of device unavailability to the ARB in writing at least 30 days before the retrofit requirement becomes applicable and upon approval of the delay by the Executive Officer of the ARB.

(7) The retrofit certification procedures for use in complying with the PM retrofit requirements for 2002 model year diesel-fueled, dual-fuel and bi-fuel urban bus engines produced before October 1, 2002, and earlier model year urban bus engines (including engines used in diesel hybrid buses) are set forth in the "California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Diesel Engines" adopted November 22, 2000, which are incorporated herein by reference.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018 and 43701(b), Health and Safety Code. Reference: Sections 39002, 39003, 39017, 39500, 39650, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and Sections 233 and 28114, Vehicle Code.

HISTORY

§ 1956.3. Zero-Emission Bus Requirements.

(a) "Zero-emission bus" means an Executive Officer certified urban bus that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) under any and all possible operational modes and conditions.

(1) A hydrogen-fuel cell bus shall qualify as a zero-emission bus.

(2) An electric trolley bus with overhead twin-wire power supply shall qualify as a zero-emission bus.

(3) A battery electric bus shall qualify as a zero-emission bus.

(4) Incorporation of a fuel-fired heater shall not preclude an urban bus from being certified as a zero-emission bus, provided the fuel-fired heater cannot be operated at ambient temperatures above 40°F and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.

(b) Zero-emission Bus Demonstration Project -- except as provided in (3) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 1956.2, with more than 200 urban transit buses in its active fleet on January 31, 2001, shall implement a demonstration project. The owner or operator shall evaluate the operation of zero-emission buses in revenue service, and prepare and submit a report on the demonstration project to the Executive Officer for inclusion in a future review of zero-emission technology.

(1) This demonstration project shall meet all of the following specifications and requirements:

(A) utilize a minimum of three zero-emission buses,

(B) include any necessary site improvements,

(C) locate fueling infrastructure onsite,

(D) provide appropriate maintenance and storage facilities,

(E) train bus operators and maintenance personnel,

(F) place the buses in revenue service for a minimum duration of 12 calendar months, (G) retain operation and maintenance records, and

(H) report on the demonstration program as set forth in subdivision (e) of section 1956.4, Title 13, CCR.

(2) When planning and implementing the demonstration project, the operator or owner shall meet the following milestones:

(A) no later than January 1, 2002, prepare and solicit bid proposals for materials and services necessary to implement the demonstration project, including but not limited to the zero-emission buses and the associated infrastructure

(B) no later than July 1, 2003, place at least three zero-emission buses in revenue service, and

(C) no later than January 31, 2005, submit a report on the demonstration project to the Executive Officer, in accordance with paragraph (e)(3) of section 1956.4, Title 13, CCR.

(3) Multiple transit agencies within the same air basin may, on a case-by-case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Electric trolley buses shall not qualify as zero-emission buses for purposes of this joint demonstration project. No more than three transit agencies can participate in any one joint project. Transit agencies that are participating in a joint demonstration project shall:

(A) designate the agency hosting the onsite demonstration,

(B) jointly fund the demonstration project, and

(C) place a minimum of three zero-emission buses per participating transit agency in revenue service.

(c) Purchase Requirement for Zero-emission Buses -- The owner or operator of a transit agency with more than 200 urban buses in active service on January 1, 2007, for transit agencies on the diesel path, and January 1, 2009, for transit agencies on the alternative-fuel path, shall purchase and/or lease zero-emission buses, in accordance with the following:

(1) For transit agencies on the diesel path, in accordance with the requirements in section 1956.2, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2008 through model year 2015 urban buses shall be zero-emission buses.

(2) For transit agencies on the alternative-fuel path, in accordance with the requirements in section 1956.2, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2010 through model year 2015 urban buses shall be zero-emission buses.

(3) The provisions of paragraphs (1) and (2) shall not apply if the operator's urban bus fleet is composed of 15 percent or more zero-emission buses on January 1, 2008, for transit agencies on the diesel path, and on January 1, 2010, for transit agencies on the alternative-fuel path, or at any time thereafter.

(4)(A) Transit agencies on either the diesel path or alternative-fuel path may earn credits for use in meeting the purchase requirements for zero-emission buses specified in paragraphs (c)(1) and (c)(2) by placing zero-emission buses in service prior to the dates specified in paragraphs (c)(1) and (c)(2). For each zero-emission bus placed into early service, credits shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.

<i>Path</i>	<i>Credits per Year Place</i>					
	<i>2000-2003</i>	<i>2004-2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Diesel	3	2.5	2	1.5	--	--
Alternative-fuel	3	2.5	2	1.5	1.5	1

(B) Zero-emission buses placed in service to meet the zero-emission bus demonstration projects as specified in subdivision (b) are not permitted to accrue credits towards the zero-emission bus purchase requirements.

(d) The Air Resources Board shall review zero-emission bus technology and the feasibility of implementing the requirements of subdivision (c) above no later than January 2006. Based on that assessment, the Board shall decide whether to proceed with the implementation of subdivision (c) requirements.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43100, 43101, 43104 and 43806, Health and Safety Code. Reference: Sections 39002, 39003, 39017, 39018, 39500, 39701, 40000, 43000, 43000.5, 43009, 43013, 43018, 43102, 43801 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.

HISTORY

§ 1956.4. Reporting Requirements for all Urban Bus Transit Agencies.

(a) The following reports on new bus purchases and/or leases by transit operators on the alternative-fuel path shall be submitted as described below:

(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the alternative-fuel path.

(2) Any requests for deviation from the requirement that 85 percent of buses purchased per year must be alternative-fuel buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90 days prior to purchase. The written request must include the reason for requesting the deviation from the 85 percent annual purchase requirement and the transit agency's future planned alternative-fuel bus purchases.

(3) Transit agencies shall submit annual reports containing: the number, model year, and fuel used for engines in transit buses they currently own or operate, bus purchases and/or leases beginning January 1, 2000, and annual average percentage of total bus purchases and/or leases that were alternative-fuel buses. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(b) The following reports on new bus purchases and/or leases by transit operators on the diesel path shall be submitted as described below:

(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the diesel path.

(2) Transit agencies shall submit annual reports containing the number, model year, and fuel used for engines in transit buses they currently own or operate, and bus purchases and/or leases beginning January 1, 2000. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(c) The following reports on the NOx fleet average requirement shall be submitted as described below:

(1) Initial documentation shall be submitted by January 31, 2001, and contain, at a minimum, the active urban bus fleet NOx emission average, and if that number exceeds the average required in subdivision (e), section 1956.2, Title 13, CCR, a schedule of actions planned to achieve that average by October 1, 2002, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or shall indicate the intent of the transit agency to retire all model year 1987 and earlier buses in its active fleet by October 1, 2002.

(2) A final report shall be submitted by January 31, 2003, detailing the active urban bus fleet NO_x emission average as of October 1, 2002, and actions, if any were needed, taken to achieve that standard, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or documenting the retirement of all model year 1987 and earlier buses.

(d) The following reports on the PM bus retrofit requirements shall be submitted as described below:

(1) Initial reports shall be submitted by the dates shown below and shall contain, at a minimum, the following information:

(A) number and model year of diesel-fueled, dual-fuel, bi-fuel, and diesel hybrid buses in the active fleet, projected number and model year of buses to be retrofitted annually, projected number and model year of exempt buses, if any, and basis for exemption.

(B) for transit agencies on the alternative-fuel path, a report for Tier 1 and Tier 2 requirements shall be submitted by January 31, 2002; a report for Tier 3 requirements shall be submitted by January 31, 2005.

(C) for transit agencies on the diesel path, a report for Tier 1 and Tier 2 requirements shall be submitted by January 31, 2002; a report for Tier 3 requirements shall be submitted by January 31, 2003.

(2) Transit agencies shall submit annual reports, in accordance with the schedules in paragraphs (A) and (B) below, containing records of number and model year of diesel-fueled, dual-fuel, bi-fuel, and diesel hybrid buses in the active fleet, number and model year of buses retrofitted per year, retrofit devices used, number and model year of exempt buses, if any, and basis for exemption, and number and model year of buses retired, if any.

(A) for transit agencies on the alternative-fuel path, a report on compliance with Tier 1 requirements shall be submitted by January 31, 2003. For Tier 2, annual compliance reports shall be submitted by January 31, beginning in 2003 and ending in 2005. For Tier 3, annual compliance reports shall be submitted by January 31, beginning in 2007 and ending in 2009.

(B) for transit agencies on the diesel path, a report on compliance with Tier 1 requirements shall be submitted by January 31, 2003. For Tier 2, annual compliance reports shall be submitted by January 31, beginning in 2003 and ending in 2004. For Tier 3, annual compliance reports shall be submitted by January 31, beginning in 2005 and ending in 2007.

(e) The following reports on the zero-emission bus demonstration program shall be submitted by those transit agencies required to conduct such demonstrations, as described below:

(1) Initial documentation shall be submitted by January 31, 2003, and contain, at a minimum, the bus order and delivery schedule, fuel type, type of refueling station, any planned facility modifications, and a revenue service demonstration plan;

(2) A financial plan shall be submitted by January 31, 2003, and contain, at a minimum, projected expenditures for capital costs for purchasing and/or leasing buses, refueling stations, any facility modifications, and projected annual operating costs;

(3) A final report shall be submitted by January 31, 2005, and contain, at a minimum, the following information:

(A) a brief description of the zero-emission technology utilized, identification of bus manufacturer and product specifications,

(B) miles driven per bus in revenue service, safety incidents, driver and mechanic training conducted, and maintenance (both scheduled and unscheduled),

(C) qualitative transit personnel and passenger experience, and

(D) a financial summary of capital costs of demonstration program, including bus purchases and/or leases, fueling infrastructure, any new facilities or modifications, and annual operating costs.

(f) The following reports on new zero-emission bus purchases and/or leases shall be submitted by transit agencies required to purchase zero-emission buses as described below:

(1) Initial report shall be submitted by January 1, 2007 for transit agencies on the diesel path, and by January 1, 2009, for transit agencies on the alternative-fuel path. The initial report shall contain, at a minimum, the following information:

(A) a brief description of the zero-emission technology to be utilized and a plan for the implementation of the requirement,

(B) for an exemption from the purchase requirement, documentation that 15 percent or more of the transit agency's active urban bus fleet is composed of zero-emission buses.

(2) Any requests for deviation from the requirement that 15 percent of buses purchased per year must be zero-emission buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90 days prior to a transit agency submitting a purchase order(s) reflecting the purchase

deviation. The written request shall include the reason for requesting the deviation and the transit agency's future planned zero-emission bus purchases.

(3) Transit agencies on the diesel path shall include in the annual reports required in paragraph (b)(2): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2015, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.

(4) Transit agencies on the alternative-fuel path shall include in the annual reports required in paragraph (a)(3): zero-emission bus purchases and/or leases beginning with model year 2010 and through model year 2015, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.

(g) Transit agencies exempted from the requirements of paragraphs (c)(5) and (d)(4), section 1956.2, Title 13, CCR, shall submit annual reports demonstrating that they are achieving NOx emission benefits required in paragraphs (c)(8)(B) and (d)(7)(B), section 1956.2, Title 13, CCR. The first report shall be submitted by January 31, 2005. Subsequent reports shall be submitted annually by January 31 through the year 2016.

NOTE: Authority cited: Sections 39600, 39601, 39659, 39701, 43018 and 41511, Health and Safety Code. Reference: Sections 39700, 39701, 41510, 41511, 43000, 43000.5, 43013, 43018, 43801 and 43806, Health and Safety Code.

HISTORY